

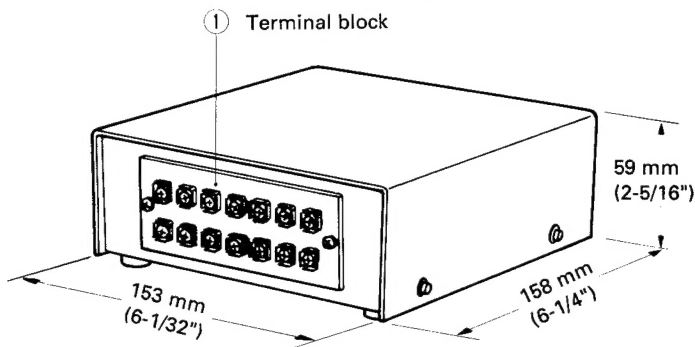
# BGM ADAPTOR

Model: **NB-U** (With background music cutout)

NB-U, BGM ADAPTOR IS DESIGNED FOR AIPHONE NEM LAMP MEMORY INTERCOM SYSTEMS.

## INSTRUCTIONS

### 1 NAMES AND FUNCTIONS



### 2 FEATURES

- \* Provides background music for your Lamp Memory Intercom System;
- 1. NEM system:
  - NEM-10, NEM-10 (Type C)
  - NEM-20, NEM-20 (Type C)
  - NEM-30, NEM-30 (Type C)
  - NEM-40, NEM-40 (Type C)
- 2. NEM-A system:
  - NEM-10A, NEM-10A (Type C)
  - NEM-20A, NEM-20A (Type C)
  - NEM-30A, NEM-30A (Type C)
  - NEM-40A, NEM-40A (Type C)
- \* Background music will mute automatically throughout the entire system during calling and communication.
- \* Background music can not be switched off at sub station.
- \* In an NEM (Type C) system with NEW-5, parallel-call adaptor, NB-U, BGM adaptor can not be used.

### 3 SPECIFICATIONS

- \* Permitted input power: 5W; 10W at its peak.
- \* Wiring:

	No. of wires required
Between NB-U and NEM-10 (or NEM-10A)	5 wires
Between NB-U and NEM-20 (or NEM-20A)	7 wires
Between NB-U and NEM-30 (or NEM-30A)	9 wires
Between NB-U and NEM-40 (or NEM-40A)	11 wires
Between NB-U and PG-10B (or PG-10A)	1 twisted pair wires

- \* Wiring distance:

Between NB-U and master	AWG WIRE SIZE	24 AWG	22 AWG	20 AWG
	DISTANCE	20'	35'	50'
	DIAMETER OR WIRE	0.5 mm	0.65 mm	0.8 mm
	DISTANCE	6 m	10 m	15 m
Between NB-U and amplifier	AWG WIRE SIZE	24 AWG	22 AWG	20 AWG
	DISTANCE	150'	250'	380'
	DIAMETER OF WIRE	0.5 mm	0.65 mm	0.8 mm
	DISTANCE	45 m	75 m	115 m

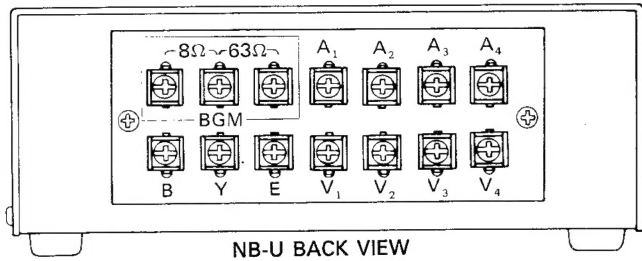
AMPLIFIER REQUIREMENTS: Use Aiphone Paging Amplifier: Model PG-10B, standard type or PG-10A UL/CSA APPROVED type in North America.

- \* Input: 100 mV for rated output.
- \* Output: PG-10B, 10 watt with 8 ohm output or existing amplifier, 10 watt with 4 ~ 16 ohm output.  
PG-10A, 10 watt with 25V balanced line or existing amplifier, 10 watt or more (63 ohm output or less) with 25V balanced line.

# 4 INSTALLATION

Do not attempt to install your NB-U adaptor until you have read and thoroughly understood the installation procedure. Aiphone's warranty for the adaptor and the system is void if adaptor is installed in a manner other than described in this manual.

## (1) ACTUAL NB-U TERMINAL LOCATIONS

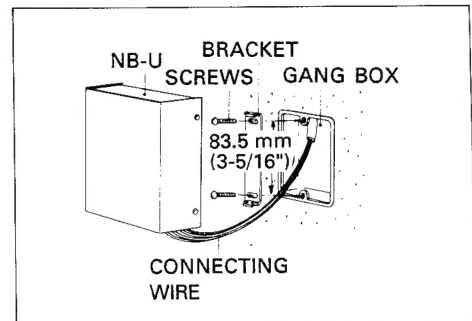


- BGM** : Connect to output terminals of the amplifier.  
\* Use 8 ohm output in case of PG-10B.  
\* Use 25V balanced in case of PG-10A. (North America only)
- B** , **Y** : Connect to **B** , **Y** terminals of NEM/NEM-A master (for BGM control).
- A1** ~ **A4** : Connect to **A1** ~ **A4** terminals of NEM/NEM-A master (for All Call transmitting signal input).
- V1** ~ **V4** : Connect to **V1** ~ **V4** terminals of NEM/NEM-A master (for BGM output).
- E** : Connect to **E** terminal of NEM/NEM-A master (for common connection).

## (2) MOUNTING INSTALLATION

INSTALL NB-U ADAPTOR AS CLOSE TO MASTER STATION AS POSSIBLE.

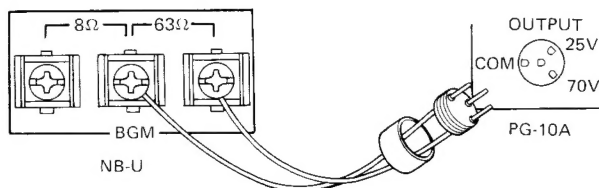
- \* Mounting to wall;
  1. Attach the mounting bracket to wall or gang box with the supplied screws.
  2. Connect wires, insert the prongs of the bracket into the holes of the body and pull the body downward. Be careful not to attach the bracket upside down.
- \* For desk-top use, remove the mounting bracket which may scratch surface of table.



## (3) IMPORTANT AMPLIFIER CONNECTION

### PG-10A

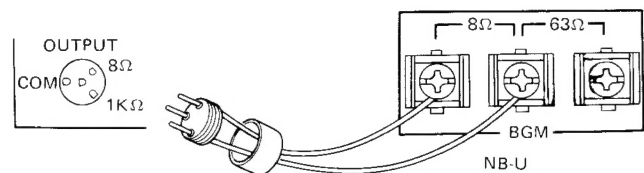
Connect 25V output terminal on PG-10A to 63Ω terminals on NB-U adaptor.



NOTE: Do not connect 70V output terminal in PG-10A.

### PG-10B

Connect 8 ohm output terminal on PG-10B to 8Ω terminals on NB-U adaptor.



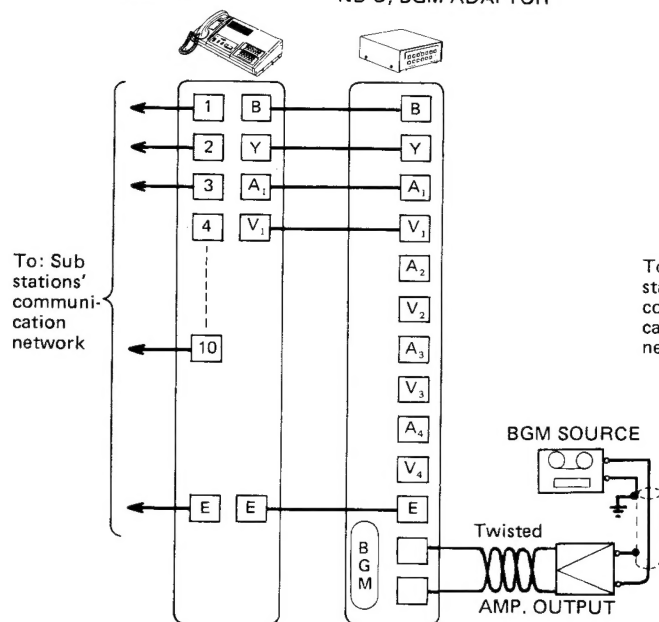
NOTE: Do not connect 1KΩ output terminal in PG-10B.

\* Number of wires varies according to type of master station.

(1) CONNECTING 10-CALL MASTER:  
NEM-10 OR NEM-10A

NEM-10 (or NEM-10A)  
MASTER

NB-U, BGM ADAPTOR

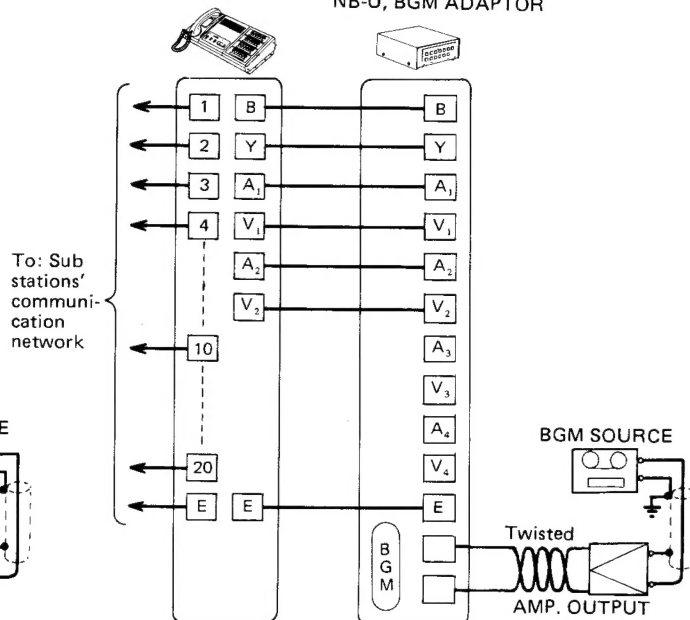


NOTE: Remove jumper between **A1** and **V1** on master station.

(2) CONNECTING 20-CALL MASTER:  
NEM-20 OR NEM-20A

NEM-20 (or NEM-20A)  
MASTER

NB-U, BGM ADAPTOR

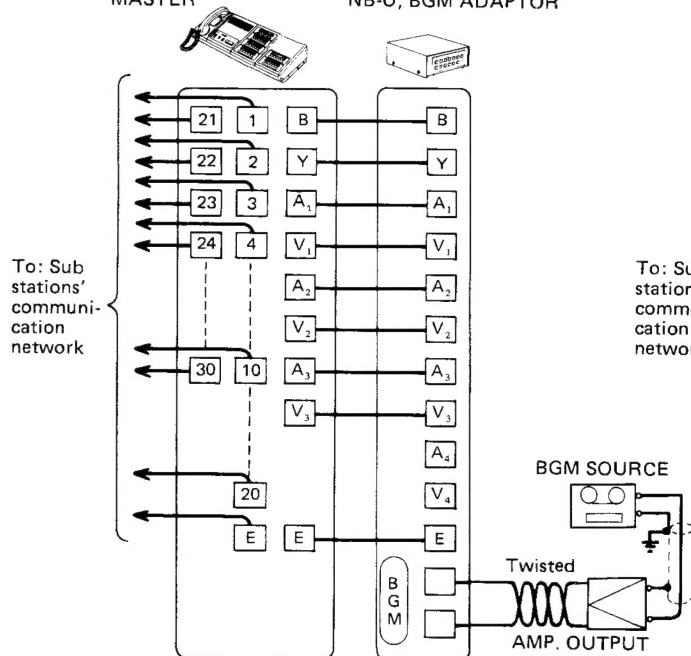


NOTE: Remove jumper between **A1** and **V1**, **A2** and **V2** on master station.

(3) CONNECTING 30-CALL MASTER:  
NEM-30 OR NEM-30A

NEM-30 (or NEM-30A)  
MASTER

NB-U, BGM ADAPTOR

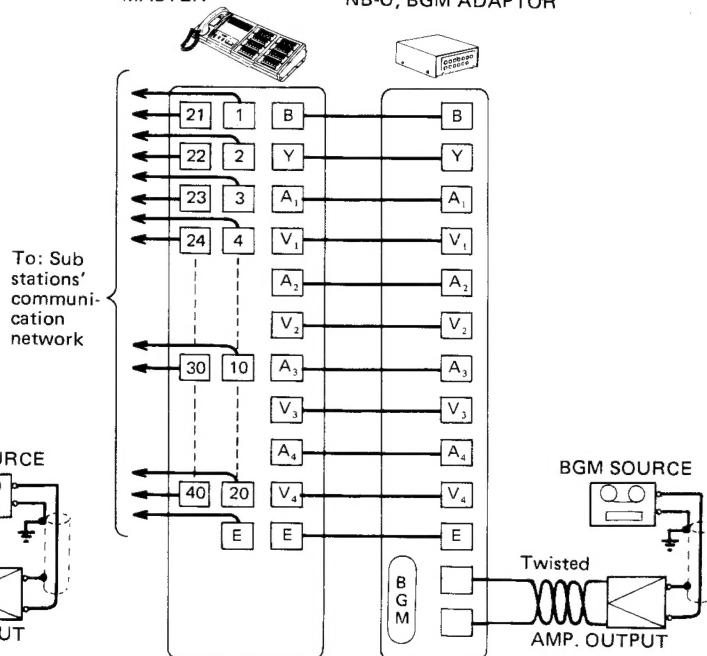


NOTE: Remove jumper between **A1** and **V1**, **A2** and **V2**, **A3** and **V3** on master station.

(4) CONNECTING 40-CALL MASTER:  
NEM-40 OR NEM-40A

NEM-40 (or NEM-40A)  
MASTER

NB-U, BGM ADAPTOR



NOTE: Remove jumper between **A1** and **V1**, **A2** and **V2**, **A3** and **V3**, **A4** and **V4** on master station.

## **6 BEFORE YOU INSTALL AND OPERATE THE EQUIPMENT**

### **- Prohibitions and precautions -**

- \* DO NOT CONNECT ANY TERMINAL ON ANY UNIT TO AC POWER LINES.
- \* BE SURE TO UNPLUG POWER SUPPLY FROM AC OUTLET BEFORE YOU OPEN THE UNIT, OR MAKE WIRING CONNECTIONS.
- \* Do not pinch connecting wires in windows, doors or desks.
- \* NB-U adaptor must be installed in as dry and dust-free environment as possible.

#### **WARRANTY**

Aiphone warrants its products to be free from defects of material and workmanship under normal use and service for a period of one year after delivery to the ultimate user and will repair free of charge or replace at no charge, should it become defective upon which examination shall disclose to be defective and under warranty. Aiphone reserves unto itself the sole right to make the final decision whether there is a defect in materials and/or workmanship; and whether or not the product is within the warranty.

This warranty shall not apply to any Aiphone product which has been subject to misuse, neglect, accident, or to use in violation of instructions furnished, nor extended to units which have been repaired or altered outside of the factory.

This warranty does not cover batteries or damage caused by batteries used in connection with the product.

This warranty covers bench repairs only, and any repairs must be made at the shop or place designated in writing by Aiphone. Aiphone will not be responsible for any costs incurred involving on site service calls.

AIPHONE CO., LTD., NAGOYA, JAPAN  
AIPHONE CORPORATION, BELLEVUE, WA.

NB-U-I(E) 1090D



COMMUNICATION SYSTEMS

**AIPHONE**

HOME, BUSINESS, INDUSTRY

Printed in Japan(E)